

REMARKS

In the first Office Action, the Examiner rejected claims 1, 3-5 and 9 as being unpatentable over Kakade, U.S. Patent No. 4,614,653 and Oftedal, "Lactation in the Dog: Milk Composition and Intake by Puppies", J. Nutr. Kakade teaches a milk replacer for young animals which includes 10-45% sugars, 10-16% protein, and 1-25% fat (on a liquid basis). While the Examiner concedes that Kakade does not teach a protein level in the claimed range, he asserts that the studies shown in Oftedal teach that protein levels may fall within the claimed ranges. However, the majority of studies the Examiner refers to in Table 4 have a protein level which is outside the claimed range, including that of Oftedal. And, neither Kakade nor Oftedal provide any teaching or suggestion which would motivate one skilled in the art to provide a milk substitute for canines having the claimed protein levels. Kakade is concerned with providing a general milk replacer for monogastric animals which is shelf-stable and which can be readily diluted to a desired solids content, not a milk replacer specifically formulated to provide optimal nutrition for puppies. Further, neither Kakade nor Oftedal teach or suggest the ratio of casein and whey recited in claim 1 as amended.

Claim 2 has been rejected under 35 U.S.C. §103 as being unpatentable over Oftedal and Kakade in view of Irvine et al., U.S. Patent No. 4,692,338. While the rejection of claim 2 has been mooted by its cancellation, this ground of rejection is relevant to amended claim 1. Irvine et al. teach a milk substitute for calves, lambs and piglets which includes 15 to 20% casein. The Examiner refers to Example 1, which discloses a substitute containing 17% casein and 6% whey protein, or a ratio of about 74:26. The Examiner concludes that it would have been obvious to use casein and whey in a milk substitute in the claimed ratio. However, Irvine et al. provide no motivation to use such amounts in a milk substitute for **puppies**, as they teach a milk substitute for calves, lambs and piglets. As pointed out in the background of the specification, the object of the present invention is to provide a milk substitute which closely matches the concentrations of components found in actual bitch milk. There is no teaching in Irvine et al. which would provide any motivation to use the claimed amount of casein and whey in a milk replacer for puppies.

Claims 6 and 14 have been rejected under 35 U.S.C. §103(a) as being unpatentable over

Oftedal and Kakade further in view of Gil et al., U.S. Patent No. 5,709,088. The Examiner acknowledges that Oftedal and Kakade do not teach fatty acids including arachidonic and docosahexaneic acids, but reasons that it would have been obvious to do so in view of Gil et al., who teach an infant formula containing from about 0.09 to 0.40% arachidonic acid and from about 0.36 to 0.51% docosahexaneic acid. Again, there is no motivation to modify Oftedal or Kakade as Gil is directed to a nutritional formula for infants and adults, *not* a milk replacer for puppies. Even if the reference teachings were combined as proposed, the claimed invention would not result as none of the references teach the claimed levels of protein or the claimed ratio of casein and whey as recited in claim 1, from which claim 6 depends.

Claims 7 and 11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kakade, Oftedal, and Gil further in view of Traitler et al. (U.S. Patent 4,938,984). Traitler et al. teach the inclusion of omega 3, omega 6 and trans fatty acids in a food composition. The Examiner has again taken the position that it would have been obvious to add fatty acids to a milk substitute for dogs "since the fatty acids are important components in membrane lipids, as taught by Traitler." However, as Traitler et al. teach a dietetic food or food supplement for humans such as infants' milk, there is no motivation to provide such fatty acids in a milk substitute for dogs. Even if one were to combine the teachings of the references, the claimed invention would not result for the same reasons pointed out above.

Claims 8 and 12 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kakade and Oftedal further in view of Kinumaki et al., U.S. Patent 4,294,856. Kinumaki et al. teach a milk replacer for infant animals such as pigs and calves which contains amino acids. The Examiner asserts that it would have been obvious to incorporate amino acids into an animal formula in view of Kinumaki. Again, as Kinumaki et al. do not teach a milk replacer for dogs, there is no motivation to use amino acids as taught in Kinumaki. Further, as claims 8 and 12 depend from claim 1, they are believed to be patentable for the same reasons stated above.

Claims 10 and 13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Kakade and Oftedal further in view of Fujimori, U.S. Patent 5,294,458. Fujimori teaches a pet food for dogs and cats which may contain fructooligosaccharide. However, Fujimori is not

directed to a milk replacer for dogs, but rather a pet food. Further, as pointed out above, neither Kakade nor Oftedal teach a milk replacer including the claimed levels of protein or the claimed amounts of casein and whey as recited in claim 1, from which claim 10 depends. Accordingly, even if the references were combined as suggested, the claimed invention would not result.

The Examiner appears to be making a reference-by-reference, limitation-by-limitation analysis of the prior art and has failed to demonstrate how the references teach or suggest their combination. The Examiner has not identified any specific suggestion, teaching or motivation to combine the references, nor has the Examiner identified any specific or inferential findings concerning the nature of the problem to be solved, or any other factual findings which would suggest any of the combinations. *In re Dembiczak*, 50 USPQ2d 1614, (CAFC 1999). None of the references, taken alone or in combination, teach or suggest a milk replacer for dogs which provides nutrition which is close to that provided by actual bitch milk as taught in the present invention.


Claims 1, 3-5 and 9 have also been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent 5,792,501 in view of Kakade and Oftedal. While the Examiner acknowledges that the claims are not identical, he has taken the position that "they describe similar limitations of a composition" and that the only difference lies in their intended use. However, there is no teaching in either Kakade or Oftedal which would suggest to one skilled in the art that a milk replacer for dogs would have the same nutritional benefits if administered to a cat, or vice versa. The '501 patent teaches a composition formulated specifically for felines while the present invention is directed to a composition formulated specifically for dogs. While there may be some overlap in the compositions of the '501 patent and the claimed composition, it is believed to be clear from a review of the compositions that the ranges of the claimed components are different for dogs and cats (compare, e.g., the casein and whey ratio, fat content, fatty acid and amino acid content). Nor does the prior art suggest modifying a composition for cats to make it suitable for dogs. Accordingly, the obviousness-type double patenting rejection is believed to be improper and should be withdrawn.

Claims 2, 6-8, 10-13, and 14 have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent 5,792,501 in view of various combinations of Kakade and Oftedal with Irvine et al., Gil, Kinumaki, or Fujimori. These claims are believed to be patentable over the '501 patent for the same reasons discussed above.

For all of the above reasons, applicant submits that claims 1 and 3-14 as amended are in condition for allowance. Early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

KILLWORTH, GOTTMAN, HAGAN  
& SCHAEFF, L.L.P.

By   
Susan M. Luna  
Registration No. 38,769

One Dayton Centre  
One South Main Street, Suite 500  
Dayton, Ohio 45402-2023  
(937)223-2050  
Facsimile: (937)223-0724